

PTO/SB/08a (08-03)

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Substitute for form 449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of

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Complete if Known

Application Number	10/712,059
Filing Date	November 14, 2003
First Named Inventor	FRANK, David G.
Art Unit	1746
Examiner Name	WILLS, Monique M.
Attorney Docket Number	9351-291

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
MZW		US- 5,176,966	01-05-1993	Epp et al.	
		US- 6,057,054	05-02-2000	Barton et al.	
		US- 6,086,643	07-11-2000	Clark et al.	
		US- 6,231,053 B1	05-15-2001	Wakamatsu	
		US- 6,338,492 B1	01-15-2002	Schilling et al.	
		US- 6,371,489 B1	04-16-2002	Combat et al.	
		US- 6,399,234 B2	06-04-2002	Bonk et al.	
		US- 6,436,568 B1	08-20-2002	Schilling et al.	
		US- 6,495,278 B1	12-17-2002	Schmid et al.	
		US- 6,596,427 B1	07-22-2003	Wozniczka et al.	
		US- 6,870,017 B2	12-30-2003	Huang et al.	
		US- 6,716,550 B1	04-08-2004	Kirby	
		US- 6,761,991 B2	07-13-2004	Frisch et al.	
		US- 2002/0068212 A1	06-06-2002	Osenar et al.	
		US- 2002/0117780 A1	08-29-2002	Inoue et al.	
		US- 2004/0258977 A1	12-23-2004	Frank et al.	
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
MZW		EP 0 349 248 A2	01-03-1990	Southland Industries, Inc.		
MZW		EP 1 156 546 A1	11-21-2001	Ballard Power Systems Inc.		
MZW		WO02/17422 A2	02-28-2002	Dana Corporation		

Examiner
Signature

M. Zwill

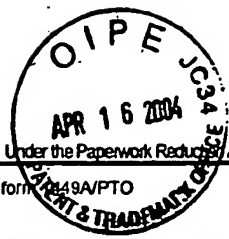
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Substitute for form PTO 49/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/712,059		
		Filing Date	November 14, 2003		
		First Named Inventor	David G. Frank		
		Art Unit	1746		
		Examiner Name	Not yet assigned		
Sheet	1	of	2	Attorney Docket Number	9351-291

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
mz		US-6,185,634	12-26-2000	Krasij et al.	
		US- 6,153,326	11-28-2000	Matsukawa et al.	
		US- 6,130,272	10-10-2000	Dopp et al.	
		US- 6,080,503	6-27-2000	Schmid et al.	
		US- 5,977,249	11-02-1999	Kovar et al.	
		US- 5,973,067	10-26-1999	Nakamura et al.	
		US- 5,908,888	6-01-1999	Nakamura et al.	
		US- 5,877,256	3-02-1999	Nakamura et al.	
		US- 5,116,558	5-26-1992	Wrobel et al.	
		US- 5,077,249	12-31-1991	Lee et al.	
		US- 4,874,667	10-17-1989	Lee et al.	
		US- 4,786,568	11-22-1988	Elmore et al.	
		US- 4,784,879	11-15-1988	Lee et al.	
		US- 4,766,176	8-23-1988	Lee et al.	
		US- 4,719,262	1-12-1988	Plueddemann	
		US- 4,269,981	5-26-1981	Homan et al.	
		US- 3,960,800	6-01-1978	Kohl, Jr.	
		US- 3,794,556	2-26-1974	Young	
		US- 3,377,309	4-09-1968	Harper	
		US- 3,877,998	7-18-1972	Young	

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
mz		EP 1 263 068 A1	12-04-2002	Dana Corporation		
		EP 1 075 034 A1	02-07-2001	Three Bond Co. Ltd.		
		EP 1 009 052 A1	06-14-2000	Matsushita Electric Industrial Co., Ltd.		
		EP 0 870 587 A2	10-14-1998	Ford Global Technologies, Inc.		
		JP 2001-338673	12-07-2001	Nok Corp.		✓
		JP 61-227368	10-09-1986	Toshiba Corp.		
		WO 02/43173	05-30-2002	Protonex Technology Corporation		

Examiner Signature	<i>m. Zwill</i>	Date Considered	6/21/05
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Substitute for form 1448/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/712,059
				Filing Date	November 14, 2003
				First Named Inventor	David G. Frank
				Art Unit	1746
				Examiner Name	Not yet assigned
(Use as many sheets as necessary)					
Sheet	2	of	2	Attorney Docket Number	9351-291

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Examiner Signature	<i>M. E. Williams</i>	Date Considered	6/21/05
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